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SUN MICROSYSTEMS C/O SONNENSCHEIN NATH & ROSENTHAL LLP P.O. BOX 061080 WACKER DRIVE STATION, SEARS TOWER CHICAGO, IL 60606-1080			AHN, SANGWOO	
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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/021,943

Filing Date: December 12, 2001

Appellant(s): HOLTZ ET AL.

HOLTZ ET AL.
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 5/11/2007 appealing from the Office action
mailed 8/24/2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,706,509	Michael Man-Hak Tso	Jan. 6, 1998
6,925,476	David L. Multer et al.	Aug. 2, 2005

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 2, 4 – 6, 9 – 10, 12 – 14, 17, 18 and 20 – 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 5,706,509 issued to Michael Man-Hak Tso (hereinafter “Tso”) in view of U.S. Patent Number 6,925,476 issued to David L. Multer et al. (hereinafter “Multer”).

■ With respect to claim 1, Tso discloses a method for comparing file tree descriptions (Fig. 2) comprising:

obtaining a first file structure (column 4 lines 55 – 62, Fig. 2);

obtaining a second file structure (column 4 lines 15 – 16, Fig. 2);

comparing said first file structure to said second file structure (column 8 lines 55 – 61, Figs. 4a – b);

generating a sequence of log of changes that transform said first file structure to said second file structure (column 12 lines 59 – 65, Fig. 4a); and

optimizing the sequence of log changes (column 7 lines 58 – 61) by replacing the creation operation and the deletion operation with a reparent operation (See Response to Argument below).

Tso does not explicitly disclose optimizing the sequence of log changes by detecting a creation operation and a deletion operation.

However, Mutler teaches optimizing the sequence of log changes by detecting a creation operation and a deletion operation (column 7 lines 55 – 63, Figs. 1A and 2). It would have been obvious to one of ordinary skill in the data processing art at the time

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the invention was made to combine the teachings of the cited references because the method of optimizing the sequence of log changes by detecting a creation operation and a deletion operation as taught by Multer would have allowed Tso's system to more efficiently utilize memory storage space and speed up the synchronization process as suggested by Multer in column 2 lines 51 – 53.

- Regarding claim 2, Tso discloses recursively walking said first file structure (column 4 lines 55 – 62, Fig. 2, Also see Response to Arguments below).
- Regarding claim 4, Tso discloses said first file structure is a file tree index (Fig. 2).
- Regarding claim 5, Tso disclose said second file structure is a file tree index (Fig. 2).
- Regarding claim 6, Tso disclose comparing one or more folders of said first file structure along with its children with a corresponding folder along with its children in said second file structure (column 4 lines 30 – 32, Fig. 2).
- Claims 9 – 10 and 12 – 14 are rejected based on the same rationale discussed in claims 1 – 2 and 4 – 6 rejections since they are essentially the same except that they set forth the limitations as "a file tree comparator" rather than "a method."
- Claims 17 – 18 and 20 – 22 are rejected based on the same rationale discussed in claims 1 – 2 and 4 – 6 rejections since they are essentially the same except that they set forth the limitations as "a computer-readable medium" rather than "a method."

(10) Response to Argument

Appellant's arguments in the Appeal Brief have been fully considered but are not persuasive.

Most of Appellant's arguments revolve around the recited limitation, "replacing the creation operation and a deletion operation with a reparent operation." Appellant mainly argued that this feature of the present application is not taught or suggested by either Tso or Multer.

Examiner respectfully traverses the Appellant's arguments for the following reasons:

First of all, the meaning or the function of the "reparent" operation is unclear both within the recited claim and within the specification. There are two places in the specification where the "reparent" operation is mentioned. First, in paragraph 41, it says that "... the comparator replaces those two operations (create or delete) with a reparent and possibly a rename ...". Second, in paragraph 42, it states that "the comparator does not, however, remove any renames, create or reparents since those can be clobbering operations ...". Even after Examiner's close inspection of the specification in order to find a reasonable way to interpret the "reparent" operation, it is still unclear as to what this "reparent" operation does, what its main functionalities are, and whether the recited limitations carries any weight in terms of novelty. Based on the foregoing reasons, Examiner's best reasonable interpretation of the fourth step recited in claim 1 ("optimizing the sequence log of changes ... with a reparent operation") is that

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optimization of the sequence log, which could potentially result in freeing memory space, is accomplished by keeping only the operations that describe the differences between the files and are efficient in transforming the first file structure to the second file structure, such as create, delete, etc. Examiner contends that Tso teaches or suggests this aspect in Figures 4C and 13 (exemplary data structures for change lists and synchronization scenarios), column 4 lines 58 – 61 (merging change lists and synchronizing them), column 6 lines 22 – 25 (change lists list the changes made to a data set to produce a modified data set), column 7 lines 51 – 57 (rather than keeping the history of all changes that might have happened, truncate the log such that only the most recent relevant changes are kept ... truncating the change list is desirable because it reduces the amount of storage), columns 9 – 13 (recording of operations such as create, delete, modify, update, etc.), and various other places within Tso's disclosure.

Appellant also argued that the Examiner erroneously asserts that Tso teaches "recursively walking said first file structure." Examiner still maintains that Tso either suggests, implicitly discloses, or inherently contains the aforementioned limitation. In column 5, Tso discloses a Change Detection mechanism (hereinafter, "CDM") which detects the changes which have occurred to a given data set since the last synchronization. For example, when data sets D0, D1, D0' and D1' are input to the CDM (D0' and D1' are a version of D0 and D1 after they have been modified), CDM determined the changes which have been made to data sets D0' and D0, and D1' and D1, to produce change list. It is evident, or implicitly suggested, that the change

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detection mechanism runs through the individual data sets in order to detect changes between them. Thus, the limitation "recursively walking said first file structure" can be reasonably interpreted as checking each record within a data set to detect something, or "walking" through a data set or a file for the purpose of analysis or detection.

For the foregoing reasons, Examiner contends that the 35 USC 103(a) rejections made on the claims in dispute are proper and should be maintained.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Sangwoo Ahn



Conferees:

Hosain Alam



HOSAIN ALAM
SUPERVISORY PATENT EXAMINER

Mohammad Ali



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